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(54) Door trim with seal

(57) A door trim to protect the edge of a door comprises a channel shaped extrusion of a rigid plastics material whose side walls 2 are inwardly inclined and whose base is formed on its upper face with a lengthwise extending channel 3. The channel includes a continuous shear line about which the trim can be broken into two pieces when the side walls are moved inwardly towards one another, but not otherwise. The two pieces can be used to seal the edge of a wider door to which they can be fixed by pins or adhesive. The plastics material is preferably PVC and a brush seal and a layer of intumescent material can be mounted in the channel.

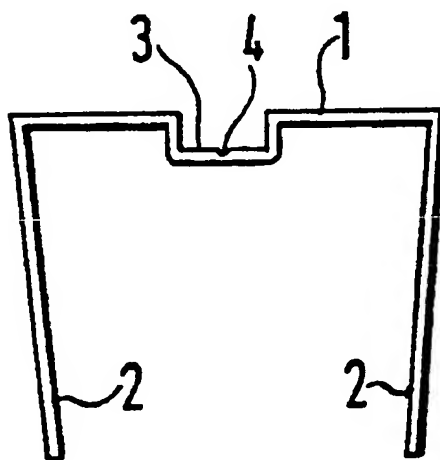


Fig.2.

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At least one drawing originally filed was informal and the print reproduced here is taken from a later filed formal copy.

The claims were filed later than the filing date within the period prescribed by Rule 25(1) of the Patents Rules 1990.

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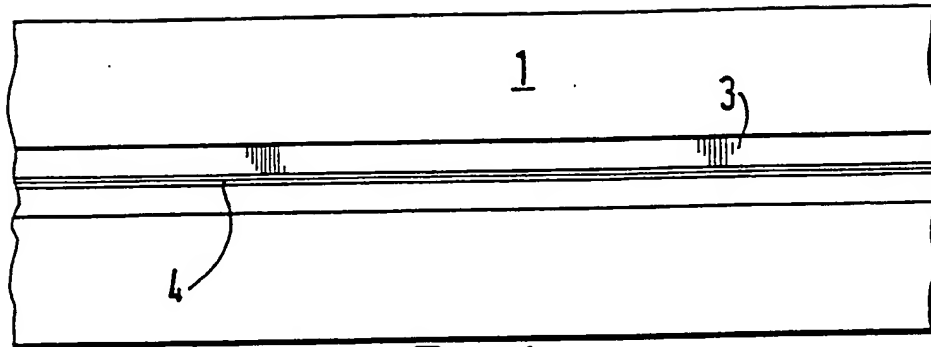


Fig. 1.

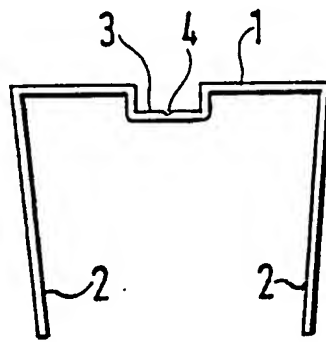


Fig. 2.

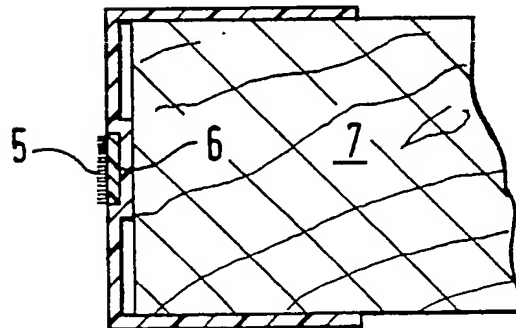


Fig. 3.

IMPROVEMENTS IN AND RELATING TO DOOR TRIMS

This invention relates to door trims and, more especially but not exclusively, to door trims which protect edge faces of a door and provide a fire resistance for that door.

Door trims are known which essentially comprise two generally "L" section mild steel strips which overlie the side edges of a stile of a door and flank an intumescent strip fitted with a smoke seal. The strips are conventionally secured in place by pins or screws or by inwardly extending flanges which locate within slots cut in the door surfaces.

Such trims have several disadvantages, these including being difficult and time consuming to fit.

One object of the present invention is to provide a door trim which does not suffer from, or at least alleviates, disadvantages inherent in existing door trims.

According to the present invention in one aspect there is provided a door trim which comprises a channel shaped extrusion of a rigid plastics material whose side walls are

inwardly inclined and whose base is formed on its upper face with a lengthwise extending channel, the channel including a continuous shear line about which the trim can be broken into two pieces when the side walls are moved inwardly towards one another, but not otherwise. The plastics material is preferably PVC.

The shear line is preferably "V" shaped insertion.

A brush seal may be positioned within the lengthwise extending channel, the seal preferably including a layer of intumescent material.

The invention will now be described by way of example only with reference to the accompanying diagrammatic drawings in which:-

Figure 1 is a plan view from above of a door trim in accordance with the invention;

Figure 2 is an end view of the door trim illustrated in Figure 1; and

Figure 3 is a sectional view showing the door trim of Figures 1 and 2 positioned over a side edge of a door.

The illustrated door trim is generally of channel section and is extruded from PVC. In its extruded form it is generally rigid. The trim includes a base 1 and side walls 2 which are inclined inwardly towards one another at a shallow angle and can flex to a limited extent relative to the base to enable the trim firmly to locate and grip the side edges of a door. The base 1 has a centrally located lengthwise extending channel 3 for receiving a brush seal 5. The brush seal may include a layer of

intumescent material 6 to provide a degree of fire protection for the door.

Along the centre line of the channel 3 is formed a "V" shaped shear line 4. The shaping and location of this shear line enables the door trim readily to be broken into two separate pieces by urging the side walls 2 inwardly towards one another. It will be understood that movement of the side walls away from each other cannot effect fracture of the trim along the shear line 4.

In use, the trim is positioned over the edge of the stile and/or head of a door 7 to provide protection therefor. The trim is positioned by flexing the side walls 2 outwardly and then sliding the trim inwardly over the door until the inner face of the base 1 abuts against the respective door edge. For doors whose thickness equates to the internal width of the base 1, the trim may be held in place by the compressive force applied by the side walls 2 to the adjoining door surfaces. If necessary, pins and/or adhesive may be employed to provide a more secure fitting.

The brush seal 5 including the layer of intumescent material 6 is then secured in the channel 3 by pins or adhesive to provide a degree of fire protection for the door.

For doors of thickness greater than the internal width of the base 1, the trim is simply broken into two by moving the side walls 2 inwardly to cause the door trim to fracture about the shear line 4. The two sides of the trim are then attached to the appropriate edges of the door by

adhesive or pins and a suitably dimensioned brush/fire seal is positioned between the exposed edges of the door trim.

It will be appreciated that the foregoing is merely exemplary of door trims in accordance with the invention and that modifications can readily be made thereto without departing from the true scope of the invention.

CLAIMS

1. A door trim which comprises a channel shaped extrusion of a rigid plastics material whose side walls are inwardly inclined and whose base is formed on its upper face with a lengthwise extending channel, the channel including a continuous shear line about which the trim can be broken into two pieces when the side walls are moved inwardly towards one another, but not otherwise.
2. A door trim as claimed in Claim 1 wherein the plastics material is PVC.
3. A door trim as claimed in Claim 1 or Claim 2 wherein the shear line is "V" shaped in cross section.
4. A door trim as claimed in any one of Claims 1 to 3 wherein a brush seal is positioned within the lengthwise extending channel.
5. A door trim as claimed in Claim 4 wherein the seal includes a layer of intumescent material.
6. A door trim substantially as herein described and as described with reference to Figures 1 and 2 of the accompanying diagrammatic drawings.

Patents Act 1977
 Examiner's report to the Comptroller under Section 17
 (= Search report) **6**

Application number
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Relevant Technical Fields

(i) UK Cl (Ed.N) E1J (JGN); E1D (DPG)

(ii) Int Cl (Ed.6) E06B 7/22, 7/23, 5/16

Search Examiner
 MR J FULCHER

Date of completion of Search
 29 MARCH 1995

Databases (see below)

(i) UK Patent Office collections of GB, EP, WO and US patent specifications.

Documents considered relevant following a search in respect of Claims :-
 1 to 6

(ii)

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